Check List 2007: **3**(2)
ISSN: 1809-127X

NOTES ON GEOGRAPHIC DISTRIBUTION

Reptilia, Squamata, Amphisbaenidae, *Amphisbaena mertensi*: Distribution extension, new state record, geographic distribution map.

Síria Lisandra de Barcelos Ribeiro[1]
Alfredo Pedroso dos Santos-Jr[1]
Wilian Vaz-Silva[2]

[1]Pontifícia Universidade Católica do Rio Grande do Sul, Laboratório de Herpetologia, Museu de Ciências e Tecnologia. Avenida Ipiranga 6681, prédio 40, 90619-900, Porto Alegre, RS, Brazil. E-mail: siherp@hotmail.com.

[2]Universidade Federal de Goiás, Instituto de Ciências Biológicas, Laboratório de Comportamento Animal. Programa de Pós-Graduação em Ciências Ambientais. Caixa Postal 131, CEP 74001-970, Goiânia, GO, Brazil; and Universidade Católica de Goiás, Departamento de Biologia. Avenida Universitária 1440, CEP 74605-900, Goiânia, GO, Brazil.

Amphisbaena mertensi Strauch, 1881 is a medium-sized amphisbaenian, diagnosable by its size, cephalic shields, tail form and number of pre-cloacal pores (Gans 1966). Currently, the species has been recorded in the Brazilian states of Mato Grosso, Mato Grosso do Sul, São Paulo, Paraná, and Santa Catarina; Corrientes, Formosa, and Misiones, in Argentina; and Amambay, Asunción, Itapua, Tarumá Fondo, and San Pedro, in Paraguay (Gans 1966; Montero 1996; Montero and Terol 1999; Pramuk and Alamillo 2003).

A specimen of *Amphisbaena mertensi*, deposited in the collection of the Museu Nacional, Rio de Janeiro (MNRJ 14117; Figure 1), was collected on 5 December 2005 by Gustavo Ribeiro Aloísio on an unpaved road crossing a disturbed Cerrado, near to pasture areas in the municipality of Aporé (ca. 18º39'48.4" S, 51º52'17.9" W), State of Goiás, Brazil (Figure 2). The specimen was identified using a redescription of the species (Gans 1966) and characterized according to the terminology presented by Gans and Alexander (1962). It is an adult male with 330 mm snout-vent length, 8.0 mm tail length (autotomized) and 11.3 mm head length. The head shields pattern is

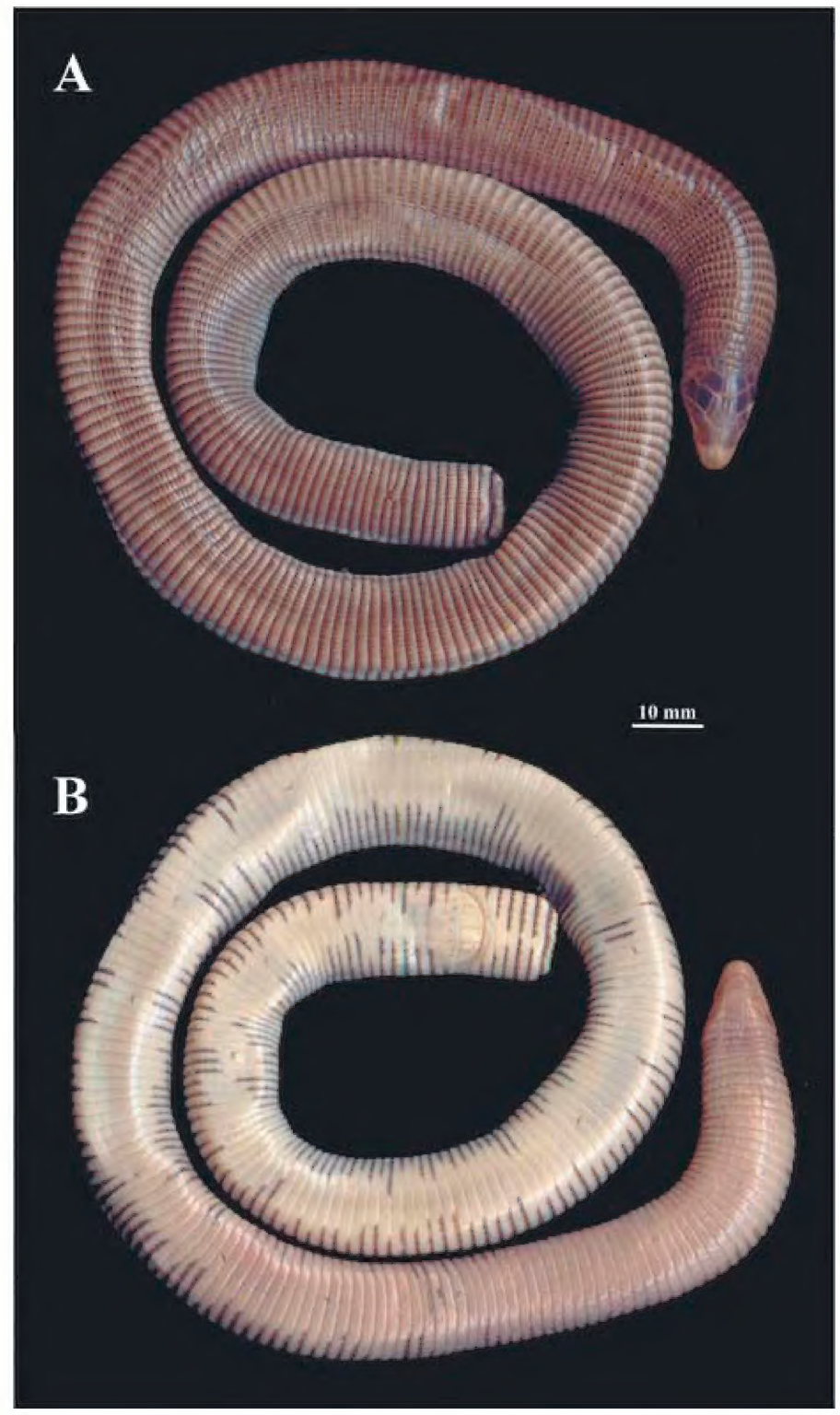

Figure 1. Dorsal (A) and ventral (B) views of *Amphisbaena mertensi* (MNRJ 14117) from Aporé municipality, State of Goiás, Central Brazil.

typical of the *Amphisbaena mertensi* from the State of Mato Grosso (*sensu* Gans 1966). The rostral scale, visible from dorsal view, is in contact with paired nasals. Posteriorly, in sequence along the head midline, a series of the following shields lies: paired prefrontals, paired frontals, paired parietals and a row of seven postparietals. The dorsolateral shields include three supralabials, one ocular rhomboid, one postocular and one postsupralabial. The chin segmentation includes three infralabials on each side of the mouth edge, one mental, one postmental with one malar on each side, and the first and second row of postgenials with four and nine shields, respectively. There are 237 body annuli, three lateral annuli on the cloacal region

NOTES ON GEOGRAPHIC DISTRIBUTION

and six caudal annuli (autotomized tail); pre and postcloacal regions formed by eight and seven segments, respectively; precloacal region with seven pores distributed in distinct segments. General dorsal coloration is dark brown (Figure 1A). General ventral coloration is cream, with irregular transversal dark brown markings formed by the anterior pigmented zone of the segments. These markings extend from approximately the anterior third of the vent to the cloaca (Figure 1B). Rostral plate, first pair of supralabials and gular region are cream colored.

Six species of *Amphisbaena* are reported to the State of Goiás: *A. alba* Linnaeus, 1758, *A. anaemariae* Vanzolini, 1997, *A. fuliginosa* Linnaeus, 1758, *A. mensae* Castro-Mello, 2000, *A. neglecta* Dunn & Piatt, 1936, and *A. vermicularis* Wagler, 1824 (Vanzolini 2002a; Gans 2005). *Amphisbaena vermicularis* and *A. mertensi* are morphologically more similar to each other than to other species, being distinguished by the number of supralabials: three in *A. mertensi*, four in *A. vermicularis*. The remaining species are easily distinguished by external morphology (Table 1).

Gans (1966) upon reviewing *Amphisbaena mertensi*, presented the locality "Colônia Teresa Cristina", in the State of Mato Grosso, as the westernmost distribution point for the species, being the locality Jales, in the state of São Paulo, the closest point to southeast. However, it is important to point out that "Colônia Teresa Cristina" was erroneously positioned in Gans' map, having been placed far south of the actual location (C. Strüssmann, pers. com.). The record of *A. mertensi* in Aporé municipality is the first for the State of Goiás, and fills a distributional gap in the mid-west region of Brazil, which turns the species distribution more homogeneous.

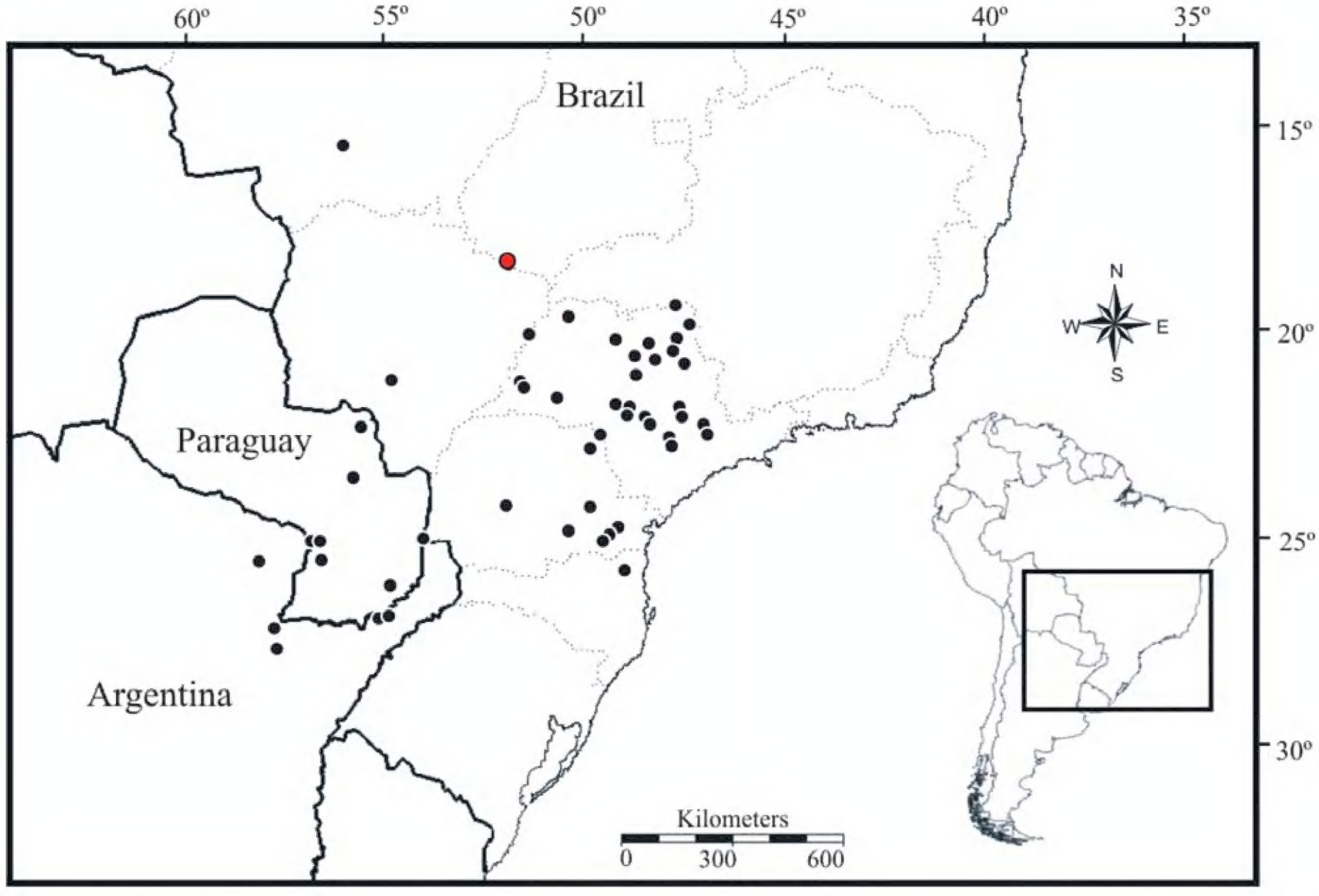

Figure 2. Geographic distribution of *Amphisbaena mertensi*. Black circles represent data from literature (Gans 1966; Montero 1996; Montero and Terol 1999; Pramuk and Alamillo 2003), and the red circle represents the new record to Aporé, in the State of Goiás, Central Brazil.

Check List 2007: **3**(2)
ISSN: 1809-127X

NOTES ON GEOGRAPHIC DISTRIBUTION

Table 1. List of *Amphisbaena* species recorded in the state of Goiás, including diagnostic characters for each species. Morphometric data in milimetres (mm). References: I = Gans (1962a); II = Vanzolini (1955); III = Vanzolini (2002a); IV = Vanzolini (1997); V = Vanzolini (2002b); VI = Castro-Mello (2000); VII = Gans (1966); VIII = Gans (1962b); IX = Hoogmoed and Ávila-Pires (1991); and X = Gans and Amdur (1966).

Characters	Species						
	A. alba	*A. anaemariae*	*A. fuliginosa*	*A. mensae*	*A. mertensi*	*A. neglecta*	*A. vermicularis*
Pre-cloacal pores	4-10	2	6-10	4	6–8	2	4-6
Body annuli	198-248	156-170	183-220	206-228	210-250	151-161	211-246
Tail annuli	13-21	18-20	19-30	25-29	25-29	20-21	23-34
Autotomy site	4-8	3-4	4-6	6-8	5-8	4-6	4-7
Dorsal midbody segments	30-42	14-16	10-13	12-14	14-25	12-14	18-26
Ventral midbody segments	35-46	14-16	9-13	16-18	16-25	12-16	18-26
Supralabials (right/left)	3-4/3-4	4/4	3/3	3/3	3/3	3/3	4/4
Infralabials (right/left)	3/3	4/4	3-4/3-4	3/3	3/3	3/3	3/3
Snout-vent length	215-672	96-172	130-450	115-130	110-410	111-150	90-325
Tail length	23-45	12-22	20-75	17-21	17-65	13-16	13-46
References	I, II, III	IV	V	VI	VII	IV, VIII, IX	IX, X

Acknowledgments
We thank the biologists Flávio C. G. Oliveira and Gustavo R. Aloísio, and Centro Tecnológico de Engenharia Ltda (CTE) for logistic support in the field; Agência Goiana de Meio Ambiente (AGMA) for the collection permit (permit # 033/2005); Ronaldo Fernandes for the loan of specimen; and Nelson R. de Albuquerque and Ana P. Maciel for the English version and critical reading of this manuscript. Carolina Castro-Mello confirmed data on *Amphisbaena anaemariae*. We are grateful to Ricardo J. Sawaya, Paula H. Valdujo, and Christine Strüssmann for comments and suggestions. SLBR and APS thank Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES) for grants.

Literature cited

Castro-Mello, C. 2000. A new species of *Amphisbaena* from central Brazil (Squamata: Amphisbaenidae). Papéis Avulsos de Zoologia 41(16): 243-246.

Gans, C. 1962a. Notes on Amphisbaenids (Amphisbaenia, Reptilia). 5. A Redefinition and a bibliography of *Amphisbaena alba* Linné. American Museum Novitates 2105: 1-31.

Gans, C. 1962b. Notes on Amphisbaenids (Amphisbaenia, Reptilia). 3. Redefinition and description of the Brasilian reptiles *Amphisbaena silvestrii* Boulenger and *Amphisbaena neglecta* Dunn and Piatt. Copeia 1962(2): 164-170.

Gans, C. 1966. Redescription of *Amphisbaena mertensi*, with comments on its geographic variation and synonymy (Amphisbaenia: Reptilia). Copeia 1966(3): 534-548.

NOTES ON GEOGRAPHIC DISTRIBUTION

Gans, C. 2005. Checklist and bibliography of the Amphisbaenia of the world. Bulletin of the American Museum of Natural History 289: 1-130.

Gans, C. and A. A. Alexander. 1962. Studies on the amphisbaenids (Amphisbaenia; Reptilia). 2. On the amphisbaenids of the Antilles. Bulletin of the Museum of Comparative Zoology 128 (3): 65–158.

Gans, C. and M. Amdur. 1966. Redescription of *Amphisbaena vermicularis* Wagler, with comments on its range and synonymy (Amphisbaenia: Reptilia). Proceedings of the California Academy Sciences 33(5): 69-90.

Hoogmoed. M. S. and T. C. S. Ávila-Pires. 1991. A new species of small *Amphisbaena* (Reptilia: Amphisbaenia: Amphisbaenidae) from western Amazonian Brazil. Boletim do Museu Paraense Emílio Goeldi (Zoologia) 7(1): 77-94.

Montero, R. 1996. Lista de localidades de Amphisbaenia de la República Argentina. Cuadernos de Herpetología 10(1/2): 25–45.

Montero, R. and G. J. Terol. 1999. Los Amphisbaenidae en Paraguay, listado geográfico. Cuadernos de Herpetología 13(1/2): 89–95.

Pramuk, J. B. and H. Alamillo. 2003. An effective technique for collecting *Amphisbaena mertensi* with notes on its natural history. Herpetological Review 34(3): 221–223.

Vanzolini, P. E. 1955. Contribuições ao conhecimento dos lagartos brasileiros da família Amphisbaenidae Gray, 1825 5. Distribuição geográfica e biometria de *Amphisbaena alba* Linné. Arquivos do Museu Nacional do Rio de Janeiro 42(2): 683-705.

Vanzolini, P. E. 1997. The silvestrii species group of *Amphisbaena*, with the description of two new Brazilian species (Reptilia: Amphisbaenia). Papéis Avulsos de Zoologia 40(3): 65-85.

Vanzolini, P. E. 2002a. An aid identification of the South American species of *Amphisbaena* (Squamata, Amphisbaenidae). Papéis Avulsos de Zoologia 42(15): 351-362.

Vanzolini, P. E. 2002b. A second note on the geographical differentiation of *Amphisbaena fuliginosa* Linné, 1758 (Squamata, Amphisbaenidae), with a consideration of the forest refuge model of speciation. Anais da Academia Brasileira de Ciências 74(4): 609-648.

Received October 2006
Accepted March 2007
Published online May 2007